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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/523,788

02/09/2005

Daisuke Itou

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7590

11/17/2006

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EXAMINER

CHOI, JACOB Y

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/523,788

Applicant(s)

ITOU, DAISUKE

Examiner

Jacob Y. Choi

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 2, 4 and 6 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 3, 5 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 09 February 2005.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d) or (f), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 09 February 2005 was considered by the examiner.

### ***Drawings***

3. Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

4. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

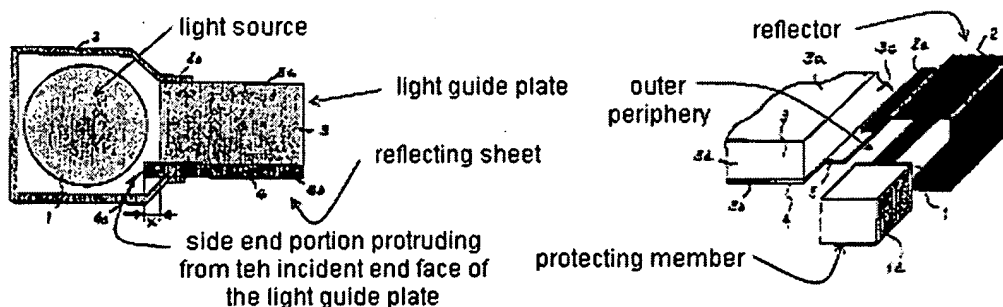
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims **1 and 4** are rejected under 35 U.S.C. 102(e) as being anticipated by Itoh et al. (USPN 6,611,304).

Regarding claim **1**, Itoh et al. discloses a light source (e.g., 1), a light guiding plate (e.g., 3) disposed close to the light source (e.g., 1) and configured to guide light from the light source (e.g., 1), a reflecting sheet (e.g., 4) disposed along a rear surface of the light guiding plate (e.g., 3), and a reflector (e.g., 2) covering the light source (e.g., 1) and configured to reflect the light from the light source (e.g., 1) toward an incident end face (e.g., 3c) of the light guiding plate (e.g., 3), the reflecting sheet (e.g., 4) having a light source side end portion (e.g., 5) protruding (e.g., Figures 1-2) from the incident end face (e.g., 3c) of the light guiding plate (e.g., 3), and a light source (e.g., 1) being provided with a protecting member (e.g., 1a) attached to an outer periphery thereof to

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allow the light source to be protected (e.g., column 4, lines 30-40; "... *the lamp holder 1a is made of silicone rubber ... etc.*"), wherein the light side end portion (e.g., 5) of the reflecting sheet (e.g., 4) and the protecting member (e.g., 1a) are located with a spacing between (e.g., column 4, lines 60-65; "... *the reflection sheet 4 is projected from the light guide plate 3, an interference is caused such that both end portions of the reflection sheet 4 are brought into contact with the lamp holders 1a at the both ends of the lamp 1 and deformed thereby and therefore, the interference can be prevented by providing a notch portion 5 at both end portions of the projected portion 4a of the reflection sheet 4 ... etc.*") the light source side end portion (e.g., 5) and the protecting member (e.g., 1a) are located with a spacing between the light source side end portion (e.g., 5) and the protecting member (e.g., 1a) for preventing contact (e.g., claim 1; "... *the lamp reflector and end portion of the projected portion are provided with notch portions for avoiding interference between the reflection sheet and the lamp holders ... etc.*") between the light source side end portion (e.g., 5) of the reflecting sheet (e.g., 4) and the protecting member (e.g., 1a).



**Note:** The term "*interference*" is defined by the prior art specification "... *interference is caused such that both end portions of the reflection sheet 4 are brought into contact with the lamp holders 1a ... etc.*", where "*avoiding interference*" is interpreted as both end portions of the reflection sheet 4 are not in contact with the lamp holders 1a. Also,

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it is inherent that there must be a space or gap provided there between if the reflection sheet 4 are not in contact with the lamp holder 1a.

Claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Things clearly shown in reference patent drawing qualify as prior art features, even though unexplained by the specification. *In re Mraz*, 173 USPQ 25 (CCPA 1972).

Regarding claim 4, Itoh et al. discloses a liquid crystal panel disposed above the lighting unit (e.g., 'Background of the Invention'; "... *The present invention relates to a planar light source device and a liquid crystal display mounted therewith as a backlight ... etc.*").

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims **2 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh et al. (USPN 6,611,304).

Regarding claim 2, Itoh et al. discloses the spacing for preventing contact between the light source side end portion of the reflecting sheet and the protecting member (e.g., column 4, lines 60-65).

However, Itoh et al. fails to disclose the specific range of the spacing between the light source side end portion of the reflecting sheet and the protecting member (e.g., "... *not larger than five times as larger as a diameter of the light source ...etc.*").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide sufficient amount of gap or spacing between the light source side end portion of the reflecting sheet and the protecting member to avoid interference, therefore the reflection sheet is not be deformed by the lamp holders (e.g., column 3, lines 15-20). In addition, it has been held that where the general conditions of a claim are disclosed in the prior art (e.g., "*avoiding interference*") discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claim 6, Itoh et al. discloses the claimed invention, explained above. In addition, Itoh et al. discloses a liquid crystal panel disposed above the lighting unit (e.g., claim 4; "... *A liquid crystal display including a liquid crystal display element ... etc.*").

#### ***Allowable Subject Matter***

9. Claims **3, 5 and 7** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Itoh (USPN 6,419,369) – sheet-like source light device and liquid crystal display device using the same

Furihata (USPN 6,309,081) – backlight unit and electronic apparatus

Kimura et al. (USPN 5,537,296) – backlight for liquid crystal display and liquid crystal display

Matsushita (US 2002/0181225) – surface light source device of side light type

Saito et al. (USPN 6,441,874) – LCD having low-thermal-conductivity lamp holder for retain heat in fluorescent lamp

Oki et al. (USPN 5,558,420) – flat lighting device

Kim (USPN 6,064,455) – back light unit, a liquid crystal display having a backlight unit and a method of assembling a back light unit

Itoh (USPN 6,343,868) – sheet-like light source device

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y. Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

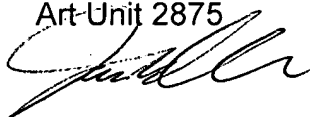
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jacob Y Choi  
Examiner  
Art Unit 2875



JC